To: Vann, Bradley[Vann.Bradley@epa.gov]

From: Stoy, Alyse

Sent: Tue 1/13/2015 5:31:57 PM

Subject: RE: Draft characterization language for Letter to Republic (version 3)

No need, but I'll come find you guys afterwards to let you know what they have to say.

Alyse Stoy

Office of Regional Counsel

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stoy.alyse@epa.gov

From: Vann, Bradley

Sent: Tuesday, January 13, 2015 11:28 AM

To: Stoy, Alyse

Subject: RE: Draft characterization language for Letter to Republic (version 3)

Thanks, Alyse. It will interesting to see the delivery. Did you need me to sit in on the call?

Bradley Vann - Remedial Project Manager

U.S. Environmental Protection Agency

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From: Stoy, Alyse

Sent: Tuesday, January 13, 2015 11:26 AM

To: Vann, Bradley; Field, Jeff; Slugantz, Lynn; Jefferson, Matthew

Subject: RE: Draft characterization language for Letter to Republic (version 3)

I will be talking to Republic's attorneys around 1:30. On a side note I also received word that I am being send for hand delivery a package from the PRP attorneys which I assume is the principal threat waste analysis.

Alyse Stoy

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From: Vann, Bradley

Sent: Tuesday, January 13, 2015 11:22 AM

To: Field, Jeff; Stoy, Alyse; Slugantz, Lynn; Jefferson, Matthew

Subject: RE: Draft characterization language for Letter to Republic (version 3)

Thanks, Jeff. Taking his edits and revised I know leave it to Lynn and Alyse to confirm or amend where needed for the letter.

Another round and preferably final Phase (2) of the GCPT with confirmation sonic coring

investigation is necessary to fully characterize areas for extent identified as containing RIM. These additional investigations shall include areas within Operable Unit 1 (OU-1) not completely characterized and are as follows:

Area 1

- 1) Complete the characterization efforts performed during the Phase 1, 1B, 1C Gamma Cone Penetrometer (GCPT) of the identified RIM south and west of the previously-defined boundaries of OU-1 Area 1 (adjacent to the exiting transfer station and along the former North Quarry surface ledge/boundary) by;
- 2) Developing and performing a statistically derived sampling plan for proposed additional RIM characterization activities
- 3) Perform the statistically derived sampling plan for characterization activities at the former North Quarry wall and base, to determine the presence or absence of Radiologically Impacted Material (RIM) that may have been transported via surface runoff over the exposed daily cover at the time of placement.

Area 2

- 1) Complete characterization of the known RIM volume (extent and current depth) that is based on a statistically derived sampling plan in support any potential future removal and/or remedial action
- 2) Complete and verify any existence of the RIM volume (extent and current depth) at the former Ford Property or Buffer Zone that is based on a statistically derived sampling plan in support any potential future removal and/or remedial action

The additional site characterization sampling addendum shall also include field screening analysis followed by the appropriate TCLP and SPLP laboratory confirmation analysis of existing RIM impacted soil cores. The analysis will be conducted for standard toxicity, and characteristic leaching procedure analyses under normal and anticipated simulated Subsurface Smoldering Event (SSE) conditions to ensure the nature of radiologic and non-radiologic materials buried at OU-1 are not mobilized. This will assist the stakeholders and EPA in determining and documenting the risk associated with the RIM on and off site. EPA is currently working with the ORD and USACE to define these methods and will coordinate with Republic over the next several weeks to ensure the selected procedures are fully documented, defensible and provides EPA an opportunity to collect split samples for quality assurance analysis. The sampling effort for this analysis shall be performed concurrently with pending extent (Phase 2

site) characterization.

Within fourteen (14) calendar days of your receipt of this letter, please submit to EPA an addendum to the "Bridgeton Landfill – West Lake Landfill Core Sampling (Phase 1B, 1C and 2) Work Plan, Revision 1" dated January 8, 2014 that describes how and where this additional geotechnical and RIM delineation sampling will be performed and the statistical methodology to be employed. The field work described in this addendum must commence as soon as practicable after EPA approval of the addendum. To the extent possible, the field work should be concurrent with the early phases of the removal design work to be performed under the Order so that barrier construction can commence as soon as possible.

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From: Field, Jeff

Sent: Tuesday, January 13, 2015 11:01 AM

To: Vann, Bradley; Stoy, Alyse; Slugantz, Lynn; Jefferson, Matthew

Subject: RE: Draft characterization language for Letter to Republic (version 2)

My edits are in red. Feel free to keep or delete.

From: Vann, Bradley

Sent: Tuesday, January 13, 2015 10:00 AM

To: Field, Jeff; Stoy, Alyse; Slugantz, Lynn; Jefferson, Matthew

Subject: Draft characterization language for Letter to Republic (version 2)

All, based on our multiple discussions and comments, here are the draft bullet areas, that EPA needs to request from Republic based on the review of existing site data and feedback from ORD and USACE to date (Phase 2). Please review and let me know if I have missed anything significant or otherwise. Note, John McKernan provided good feedback on nature characterization paragraph. I also used the legal "shall" word but I naturally leave that to Alyse to vet accordingly. The 14 calendar days requirement was also what was in the draft letter. Thanks.

Another round and preferably final Phase (2) of the GCPT with confirmation sonic coring investigation is necessary to fully characterize areas for extent identified as containing RIM. These additional investigations shall include areas within Operable Unit 1 (OU-1) not completely characterized and are as follows:

Area 1

- 1) Complete the characterization efforts performed during the Phase 1, 1B, 1C Gamma Cone Penetrometer (GCPT) of the identified RIM south and west of the previously-defined boundaries of OU-1 Area 1 (adjacent to the exiting transfer station and along the former North Quarry surface ledge/boundary) by
- 2) Developing and performing a statistically derived sampling plan for proposed additional RIM characterization activities
- 3) Perform the statistically derived sampling plan for characterization activities at the former North Quarry wall (interface?) and base, to determine the presence or absence of Radiologically Impacted Material (RIM) that may have been transported via surface runoff over the exposed daily cover at the time of placement.
- **4)** Complete delineation of the known RIM volume (extent and current depth elevations) that is statistically defensible to support future removal and/or remedial action (Is this sentence necessary?)

Area 2

- 1) Complete characterization of the known RIM volume (extent and current depth) that is based on a statistically derived sampling plan in support any potential future removal and/or remedial action
- 2) Complete and verify any existence of the RIM volume (extent and current depth) at the former Ford Property or Buffer Zone that is based on a statistically derived sampling plan in support any potential future removal and/or remedial action

The additional site characterization sampling addendum shall also include field screening analysis followed by the appropriate TCLP and SPLP laboratory confirmation analysis of existing RIM impacted soil cores. The analysis will be conducted for standard toxicity, and characteristic leaching procedure analyses under normal and anticipated simulated Subsurface Smoldering Event (SSE) conditions to ensure the nature of radiologic and non-radiologic materials buried at OU-1 are not mobilized. This will assist the stakeholders and EPA in determining and documenting the risk associated with the RIM on and off site. EPA is currently working with the ORD and USACE to define these methods and will coordinate with Republic over the next several weeks to ensure the selected procedures are fully documented, defensible and provides EPA an opportunity to collect split samples for quality assurance analysis. The sampling effort for this analysis shall be performed concurrently with pending extent (Phase 2 site) characterization.

Within fourteen (14) calendar days of your receipt of this letter, please submit to EPA an addendum to the "Bridgeton Landfill – West Lake Landfill Core Sampling (Phase 1B, 1C and 2) Work Plan, Revision 1" dated January 8, 2014 that describes how and where this additional geotechnical and RIM delineation sampling will be performed and the statistical methodology to be employed. The field work described in this addendum must commence as soon as practicable after EPA approval of the addendum. To the extent possible, the field work should be concurrent with the early phases of the removal design work to be performed under the Order so that barrier construction can commence as soon as possible.

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